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10/598,161	07/23/2008	Ofer Wald	40000005-0201-002	1815

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EXAMINER
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CHENEY, BOBAE K.

ART UNIT	PAPER NUMBER
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2469

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10/13/2010

PAPER

**Please find below and/or attached an Office communication concerning this application or proceeding.**

The time period for reply, if any, is set in the attached communication.

<b>Office Action Summary</b>	<b>Application No.</b> 10/598,161	<b>Applicant(s)</b> WALD ET AL.	
	<b>Examiner</b> BOBAE K. CHENEY	<b>Art Unit</b> 2469	

-- The MAILING DATE of this communication appears on the cover sheet with the correspondence address --

### Period for Reply

A SHORTENED STATUTORY PERIOD FOR REPLY IS SET TO EXPIRE 3 MONTH(S) OR THIRTY (30) DAYS, WHICHEVER IS LONGER, FROM THE MAILING DATE OF THIS COMMUNICATION.

- Extensions of time may be available under the provisions of 37 CFR 1.136(a). In no event, however, may a reply be timely filed after SIX (6) MONTHS from the mailing date of this communication.
- If NO period for reply is specified above, the maximum statutory period will apply and will expire SIX (6) MONTHS from the mailing date of this communication.
- Failure to reply within the set or extended period for reply will, by statute, cause the application to become ABANDONED (35 U.S.C. § 133). Any reply received by the Office later than three months after the mailing date of this communication, even if timely filed, may reduce any earned patent term adjustment. See 37 CFR 1.704(b).

### Status

- 1) ☒ Responsive to communication(s) filed on 10 June 2010.
- 2a) ☒ This action is **FINAL**.                      2b) ☐ This action is non-final.
- 3) ☐ Since this application is in condition for allowance except for formal matters, prosecution as to the merits is closed in accordance with the practice under *Ex parte Quayle*, 1935 C.D. 11, 453 O.G. 213.

### Disposition of Claims

- 4) ☒ Claim(s) 1-36 is/are pending in the application.
- 4a) Of the above claim(s) \_\_\_\_\_ is/are withdrawn from consideration.
- 5) ☐ Claim(s) \_\_\_\_\_ is/are allowed.
- 6) ☒ Claim(s) 1-36 is/are rejected.
- 7) ☐ Claim(s) \_\_\_\_\_ is/are objected to.
- 8) ☐ Claim(s) \_\_\_\_\_ are subject to restriction and/or election requirement.

### Application Papers

- 9) ☐ The specification is objected to by the Examiner.
- 10) ☒ The drawing(s) filed on 18 August 2006 is/are: a) ☒ accepted or b) ☐ objected to by the Examiner.  
Applicant may not request that any objection to the drawing(s) be held in abeyance. See 37 CFR 1.85(a).  
Replacement drawing sheet(s) including the correction is required if the drawing(s) is objected to. See 37 CFR 1.121(d).
- 11) ☐ The oath or declaration is objected to by the Examiner. Note the attached Office Action or form PTO-152.

### Priority under 35 U.S.C. § 119

- 12) ☐ Acknowledgment is made of a claim for foreign priority under 35 U.S.C. § 119(a)-(d) or (f).
- a) ☐ All    b) ☐ Some \*    c) ☐ None of:
1. ☐ Certified copies of the priority documents have been received.
2. ☐ Certified copies of the priority documents have been received in Application No. \_\_\_\_\_.
3. ☐ Copies of the certified copies of the priority documents have been received in this National Stage application from the International Bureau (PCT Rule 17.2(a)).

\* See the attached detailed Office action for a list of the certified copies not received.

### Attachment(s)

- |  |   |
|--|---|
| 1) <input checked="" type="checkbox"/> Notice of References Cited (PTO-892)                                | 4) <input type="checkbox"/> Interview Summary (PTO-413)<br>Paper No(s)/Mail Date. _____ |
| 2) <input type="checkbox"/> Notice of Draftperson's Patent Drawing Review (PTO-948)                        | 5) <input type="checkbox"/> Notice of Informal Patent Application                       |
| 3) <input type="checkbox"/> Information Disclosure Statement(s) (PTO/SB/08)<br>Paper No(s)/Mail Date _____ | 6) <input type="checkbox"/> Other: _____  |

### DETAILED ACTION

1. Claims 1 – 28 and 30 – 35 are amended by applicant.

#### ***Claim Rejections - 35 USC § 103***

2. The following is a quotation of 35 U.S.C. 103(a) which forms the basis for all obviousness rejections set forth in this Office action:

(a) A patent may not be obtained though the invention is not identically disclosed or described as set forth in section 102 of this title, if the differences between the subject matter sought to be patented and the prior art are such that the subject matter as a whole would have been obvious at the time the invention was made to a person having ordinary skill in the art to which said subject matter pertains. Patentability shall not be negated by the manner in which the invention was made.

3. **Claims 1 – 4, 9, 11 – 14, 19, 22, 23, 26, 27, 29, 30, 33, 34, and 36** are rejected under 35 U.S.C. 103(a) as being unpatentable over Hong (US Publication 2002/0062372) and Zhang (Patent 7,558,875).

4. Regarding to **claim 1**, "A method for managing peer to peer traffic, the method comprising: identifying a peer to peer request for a requested file that is stored within a cluster of servers," Hong teaches receiving transaction request in peer to peer network [Paragraph 12, 90]. "Checking if the requested file is stored at one of predetermined devices that do not belong to an ISP network and the requested file does not belong to the cluster of servers; wherein if the requested file is stored in a predetermined device out of the predetermine devices the method comprises providing a list of possible file sources, the list comprises a member of the cluster of servers that stored the requested file and the predetermined device that stores the requested file." Hong teaches cache server providing the most efficient server farm (cluster) for the request [Paragraph 83]. Hong does not expressly teach providing a list of possible file sources. However, Zhang teaches providing boot list that lists all the peer groups' candidates (file sources)

[Column 8 Line 43 – 62]. The list includes the first peer group that is closet to client and second closet peer group to client [Figure 10]. It would have been obvious to one of ordinary skill in the art at the time of the invention to provide list of file sources taught by Zhang when file is requested taught by Hong for the purpose of increase the sources of the file to decrease the failure of transferring files. When a device fails to transfer the file, the file can be transferred through another device that has the same file.

5. Regarding to **claim 2**, “wherein the stage of providing involves providing contact information of multiple peer to peer servers, whereas at least two peer to peer servers belong to a cluster; and do not belong to an ISP network,” Hong teaches providing origin HTTP servers [Paragraph 20].

6. Regarding to **claim 3**, “caching, (a) at the cluster, at least one peer to peer file and providing at least one cached peer to peer file to a user,” Hong teaches cache server [Paragraph 14, 15, 39]. “(b) caching outside a cluster at least one predetermined device file and providing at least one cached predetermined device file to a user,” Zhang teaches boot peer cache including list of peers in the overlay network that may utilized as starting points for the locality-aware peer when it is searching for a peer group (outside a cluster) [Column 6 Line 43 – 63].

7. Regarding to **claim 4**, “wherein the caching on predetermined devices and on peer to peer serves involves applying a hash function,” Hong teaches converting destination invariants to hash function [Paragraph 52 – 55].

8. Regarding to **claim 9**, “(a) caching peer to peer files regardless of a request to retrieve a peer to peer file,” Hong teaches replicating content to cache [Paragraph 9].

"(b) caching peer to peer files on predetermined devices regardless of a request to retrieve a peer to peer file," Zhang teaches boot peer cache including list of peers in the overlay network that may utilized as starting points for the locality-aware peer when it is searching for a peer group (outside a cluster) [Column 6 Line 43 – 63].

9. Regarding to **claim 11**, "a system for managing peer to peer traffic, the system comprises: a cluster of peer to peer server," Hong teaches server farm (cluster) [Figure 1, Paragraph 90]. "A first device adapted to identify a peer to peer request for a requested file that is stored within a cluster of server," Hong teaches receiving transaction request [Paragraph 12]. "Checking if the requested file is stored at one of predetermined devices that do not belong to an ISP network and the requested file does not belong to the cluster of servers; wherein if the requested file is stored in a predetermined device out of the predetermine devices the method comprises providing a list of possible file sources, the list comprises a member of the cluster of servers that stored the requested file and the predetermined device that stores the requested file." Hong teaches cache server providing the most efficient server farm (cluster) for the request [Paragraph 83]. Hong does not expressly teach providing a list of possible file sources. However, Zhang teaches providing boot list that lists all the peer groups' candidates (file sources) [Column 8 Line 43 – 62]. The list includes the first peer group that is closet to client and second closet peer group to client [Figure 10]. It would have been obvious to one of ordinary skill in the art at the time of the invention to provide list of file sources taught by Zhang when file is requested taught by Hong for the purpose of increase the sources of the file to decrease the failure of transferring files. When a

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device fails to transfer the file, the file can be transferred through another device that has the same file.

10. **Claim 12** is similar to claim 2. Therefore, claim 12 is rejected under the similar ground.

11. Regarding to **claim 13**, "wherein the predetermined devices comprises multiple caching units," Zhang teaches boot peer cache including list of peers in the overlay network that may utilized as starting points for the locality-aware peer when it is searching for a peer group (outside a cluster) [Column 6 Line 43 – 63].

12. Regarding to **claim 14**, "wherein at least one predetermined device determines a location of a file by applying hash function," Hong teaches converting destination invariants to hash function [Paragraph 52 – 55].

13. **Claim 19** is similar to claim 9. Therefore, claim 19 is rejected under the similar ground.

14. Regarding to **claim 22**, "providing a cache that belongs to a cluster of servers that is adapted to service peer to peer requests from a first group of users," Hong teaches cache server [Figure 1 Part 116]. "Monitoring peer to peer traffic between at least one other group of users," Hong teaches monitoring hotness of requests [Paragraph 65, 66]. Hong does not expressly teach "providing plurality of predetermined devices that do not belong to an ISP network and do not belong to the cluster, wherein the predetermined devices are adapted to service peer to peer requests from a first group of user." However, Zhang teaches providing multiple peer groups [Column 7 Line 14 – 39]. It would have been obvious to one of ordinary skill in

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the art at the time of the invention to provide multiple peer groups taught by Zhang when file is requested taught by Hong for the purpose of increase the sources of the file to decrease the failure of transferring files. When a device fails to transfer the file, the file can be transferred through another device that has the same file. "Selectively caching at the cache at least a portion of the monitored peer to peer traffic on a cache that belongs to the cluster of servers and on plurality of predetermined devices that do not belong to an ISP network and do not belong to the cluster," Hong teaches cache server [Paragraph 14, 15, 39], and Zhang teaches boot peer cache including list of peers in the overlay network that may utilized as starting points for the locality-aware peer when it is searching for a peer group (outside a cluster) [Column 6 Line 43 – 63].

15. Regarding to **claim 23**, "a method for managing traffic, the method comprises: identifying a request to receive a file over a network and providing at least one address of a server within a cluster of servers," Hong teaches receiving transaction request in peer to peer network [Paragraph 12, 90]. "Distributing peer to peer files between the various members of the cluster," Hong teaches distributing shared information (files) among all cluster members [Paragraph 86]. Hong does not expressly teach "providing peer to peer files previously stored in a member of the cluster from outside the cluster of servers if the member of the cluster fails." Zhang teaches providing multiple peer groups to reduce the risk of overlay network partition due to localized transport network failure [Column 7 Line 14 – 39]. It would have been obvious to one of ordinary skill in the art at the time of the invention to provide multiple peer groups taught by Zhang

when file is requested taught by Hong for the purpose of increase the sources of the file to decrease the failure of transferring files.

16. Regarding to **claim 26**, "wherein providing include providing multiple file portions, wherein each file portion is stored on plurality of members of the cluster," Hong teaches sending packet with various part such as cookie and tag [Figure 9].

17. Regarding to **claim 27**, "wherein the cluster is adapted to store file portions on plurality of members using has function," Hong teaches replicate (store) hot content to a cache [Paragraph 9].

18. Regarding to **claim 29**, "further comprising performing load balancing between members of the cluster," Hong teaches traffic managers perform load balancing [Paragraph 37].

19. **Claim 30** is similar to claim 11. Therefore, claim 30 is rejected under the similar ground.

20. **Claim 33** is similar to claim 26. Therefore, claim 33 is rejected under the similar ground.

21. **Claim 34** is similar to claim 27. Therefore, claim 34 is rejected under the similar ground.

22. **Claim 36** is similar to claim 39. Therefore, claim 36 is rejected under the similar ground.

23. **Claims 5 – 8, 15 – 18, 21, 28, and 35** are rejected under 35 U.S.C. 103(a) as being unpatentable over Hong and Zhang as applied to claims 1, 11, 23, and 30 above, and further in view of Jayaraman (US Publication 2003/0210694).



24. Regarding to **claim 5**, Hong and Zhang teaches multiple devices connected to transfer requested file, but does not expressly teach "punching-plurality of holes in an ISP router filter for the connection to plurality of predetermined devices." However, Jayaraman teaches ISP router connected to client devices that are outside of ISP network [Paragraph 152, Figure 3]. In order to connect the devices outside of the ISP, the router filter needs to punch holes to allow devices to be connected. It would have been obvious to one of ordinary skill in the art at the time of the invention to connect clients outside of ISP taught by Jayaraman in multiple devices connected to transfer requested file taught by Hong and Zhang for the purpose of provide the files faster.

25. Regarding to **claim 6**, "a stage of providing contact information of possible file sources, wherein the possible file sources comprises plurality of predetermined devices," Hong teaches providing a list of IP addresses that are serving the content requested [Paragraph 73].

26. Regarding to **claim 7**, "wherein the provided contact information of possible file sources is responsive to (a) at least one user parameter, (b) at least one ISP router parameter, and (c) at least one cluster parameter," Hong teaches parsing response from the servers to the clients for payload information [Paragraph 91].

27. Regarding to **claim 8**, "wherein the provided contact information of possible files sources is responsive to at least one file source parameter or path parameter of predetermined device," Hong teaches generating a tag associated with a server (path parameter) [Paragraph 13].

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28. **Claim 15** is similar to claim 5. Therefore, claim 15 is rejected under the similar ground.

29. **Claim 16** is similar to claim 6. Therefore, claim 16 is rejected under the similar ground.

30. **Claim 17** is similar to claim 7. Therefore, claim 17 is rejected under the similar ground.

31. **Claim 18** is similar to claim 8. Therefore, claim 18 is rejected under the similar ground.

32. Regarding to **claim 21**, "wherein the cluster is located within an ISP operational center," Hong teaches server farm under communications network [Figure 1 Parts 104, 132]. "The predetermined devices belong to distant networks that are connected over costly connection," Jayaraman teaches ISP router connected to client devices that are outside of ISP network [Paragraph 152, Figure 3].

33. Regarding to **claim 28**, Hong teaches receiving a request, but does not expressly teach "wherein the request is a request from one of predetermined devices that do not belong to an ISP network and does not belong to the cluster of servers." However, Jayaraman teaches ISP router connected to client devices that are outside of ISP network [Paragraph 152, Figure 3] and processing client's request [Abstract]. It would have been obvious to one of ordinary skill in the art at the time of the invention to connect clients outside of ISP taught by Jayaraman in multiple devices connected to transfer requested file taught by Hong and Zhang for the purpose of provide the files faster.

34. **Claim 35** is similar to claim 28. Therefore, claim 35 is rejected under the similar ground.

35. **Claims 10, 20, 25, and 32** are rejected under 35 U.S.C. 103(a) as being unpatentable over Hong and Zhang as applied to claims 1, 11, and 23 above, and further in view of Hashem (US Patent 6,792,544).

36. Regarding to **claim 10**, "providing an encrypted file to the user wherein the encryption corresponds to the encryption of the cluster and the source file is an encrypted file with encryption different from the encryption of the cluster," Hong teaches providing encryption for secure session negotiation (cluster) [Paragraph 38]. Hong does not expressly teach providing encryption for source file. However, Hashem teaches providing encrypted source file [abstract]. It would have been obvious to one of ordinary skill in the art at the time of the invention to combine source file encryption taught by Hashem and encryption for cluster taught by Hong for the purpose of increase the security for the source file transmission.

37. **Claims 20, 25, and 32** are similar to claim 10. Therefore, claim 20 is rejected under the similar ground.

38. **Claims 24 and 31** are rejected under 35 U.S.C. 103(a) as being unpatentable over Hong and Zhang as applied to claims 23 and 31 above, and further in view of Jacobs (US Publication 2002/0023173).

39. Regarding to **claim 24**, "wherein the cluster is configured to distribute the peer to peer file of the member if the member is not functional for at least a predetermined period of time," Zhang teaches providing multiple peer groups to reduce the risk of

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overlay network partition due to localized transport network failure [Column 7 Line 14 – 39]. Zhang does not expressly teach detecting the failure by member not functioning for predetermined time. However, Jacobs teaches determining failure of client by connection time out (predetermined time) [Paragraph 92]. It would have been obvious to one of ordinary skill in the art at the time of the invention to determine failure taught by Zhang by detecting timeout taught by Jacobs for the purpose of give time to device to recover. If the device failed for short amount of time, it's not necessary to change the connection.

40. **Claim 31** is similar to claim 24. Therefore, claim 31 is rejected under the similar ground.

#### ***Response to Arguments***

41. Applicant's arguments with respect to claims 1, 11, 22, 23, and 30 have been considered but are moot in view of the new ground(s) of rejection.

#### ***Conclusion***

42. Applicant's amendment necessitated the new ground(s) of rejection presented in this Office action. Accordingly, **THIS ACTION IS MADE FINAL**. See MPEP § 706.07(a). Applicant is reminded of the extension of time policy as set forth in 37 CFR 1.136(a).

A shortened statutory period for reply to this final action is set to expire THREE MONTHS from the mailing date of this action. In the event a first reply is filed within TWO MONTHS of the mailing date of this final action and the advisory action is not mailed until after the end of the THREE-MONTH shortened statutory period, then the

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shortened statutory period will expire on the date the advisory action is mailed, and any extension fee pursuant to 37 CFR 1.136(a) will be calculated from the mailing date of the advisory action. In no event, however, will the statutory period for reply expire later than SIX MONTHS from the date of this final action.

Any inquiry concerning this communication or earlier communications from the examiner should be directed to BOBAE K. CHENEY whose telephone number is (571)270-7641. The examiner can normally be reached on Monday - Thursday 9:00 AM- 5:00 PM.

If attempts to reach the examiner by telephone are unsuccessful, the examiner's supervisor, Ian Moore can be reached on (571)272-3085. The fax phone number for the organization where this application or proceeding is assigned is 571-273-8300.

Information regarding the status of an application may be obtained from the Patent Application Information Retrieval (PAIR) system. Status information for published applications may be obtained from either Private PAIR or Public PAIR. Status information for unpublished applications is available through Private PAIR only. For more information about the PAIR system, see <http://pair-direct.uspto.gov>. Should you have questions on access to the Private PAIR system, contact the Electronic Business Center (EBC) at 866-217-9197 (toll-free). If you would like assistance from a USPTO Customer Service Representative or access to the automated information system, call 800-786-9199 (IN USA OR CANADA) or 571-272-1000.

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